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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/457,267	12/09/1999	NAOMI IWAYAMA	1359.1020	7493

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EXAMINER

BIENEMAN, CHARLES A

ART UNIT PAPER NUMBER

2176

DATE MAILED: 06/18/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

8

Office Action Summary

Applicant(s)

09/457,267

Applicant(s)

IWAYAMA, NAOMI

Examiner

Charles A. Bieneman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 5 and 7-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5, and 7-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

1. This action is responsive to the following communication: Amendment filed on May 21, 2003.
2. Claims 1, 2, 5, and 7-9 are pending. Claims 1, 8, and 9 are independent claims.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. With respect to the rejection of each dependent claim below, the preceding rejection(s) of the relevant base claim(s) is incorporated therein.
5. **Claims 1-2 and 8-9** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,005,498 to Yang et al., issued December 21, 1999, filed October 29, 1997 in view of Japanese Patent Application Publication Number Hei 7 (1995)-129572 A of Matsushita Electric Industrial Co., Ltd, partial translation provided by applicant in the Information Disclosure Statement filed February 11, 2003 (hereinafter "Matsushita") and U.S. Patent Number 5,896,321 to Miller et al., issued April 20, 1999, filed November 14, 1997.

Regarding **independent claims 1, 8, and 9**, Yang et al. teach a device for entering a character string. (Yang et al., Fig. 2; col. 1, lines 5-6.)

Further, Yang et al. teach an input part for entering a character string. (Yang et al., Fig. 2, block 210.)

Further, Yang et al. teach an input situation acquiring part inasmuch as they teach a MENU key that allows the user to select a "pinyin entry" option. (Yang et al., col. 3, lines 15-17.)

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Further, Yang et al. do not teach a situation control part for affirming a dictionary used for generating a candidate character string and designating it as a situation-optimized dictionary. However, Matsushita teaches a dictionary selection part that selects a special dictionary based on the acquiring situation inasmuch as factors include the time of input (Matsushita translation, p. 2, line 9: “using times”) and context (Matsushita translation, p. 2, lines 9-11: “the arranged order of the respective special dictionary [presumably, *dictionaries*] recorded in the dictionary usage recording part.”). Moreover, Matsushita would have provided motivation for one of ordinary skill in the art to take this step inasmuch as Matsushita implies that this step allows dictionaries containing words for special disciplines to be used where appropriate. (Matsushita, col. 2, lines 4-7.) Therefore, it would have been obvious to one of ordinary skill in the art to have implemented a situation control part for affirming a dictionary used for generating a candidate character string.

Further, Yang et al. teach a candidate character string generation part for generating and outputting an output candidate string in response to a character string entered with the input part. (Yang et al., col. 4, line 63 – col. 5, line 7: “After a user presses the OK key 386 to indicate that the word is completely entered, the microprocessor 220 shown in FIG. 2 initiates a search through the dictionary 244 in ROM 240 for all possible Chinese characters associated with the entered phonetic syllable. . . . The eligible Chinese characters are loaded into the RAM 250 for display.”) Yang et al. do not teach generating a string that is optimal for the situation using the situation-optimized dictionary designated by the situation control part. However, this step would have been obvious in view of Matsushita under the same rationale stated above regarding a situation control part for affirming a dictionary used for generating a candidate character string.

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Further, Yang et al. teach a candidate character string affirmation processing part for affirming the outputted candidate character string inasmuch as Yang et al. teach a character selection key. (Yang et al., col. 5, lines 51-54.)

Further, Yang et al. teach an affirmed character string storing part for storing a character string that has been affirmed. (Yang et al., col. 5, lines 61-64: "If a character selection key was pressed as determined by step 460, the display 230 is cleared and the selected character is displayed and entered into the RAM 250 shown in FIG. 2.") Yang et al. do not teach storing a string affirmed with the situation-optimized dictionary, but this step would have been obvious in view of Matsushita under the same rationale stated above regarding a situation control part for affirming a dictionary used for generating a candidate character string.

Further, Yang et al. does not teach updating the contents of the situation-optimized dictionary dynamically. However, Miller et al. teach updating a dynamic dictionary by adding confirmed data entries. (Miller et al., col. 9, lines 19-23.) Miller et al. further teach the benefit of allowing the system to adaptively learn in response to user-defined entries. (Miller et al., col. 9, lines 4-6.) Therefore, it would have been obvious to one of ordinary skill in the art to update the contents of the situation-optimized dictionary dynamically.

Regarding **dependent claim 2**, Yang et al. teach the situation acquired comprising information relating to a user inputting the character string inasmuch as Yang et al. teach a "pinyin entry" option. (Yang et al., col. 3, lines 15-17.)

6. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al. and Matsushita as applied to claim 1 above, and further in view of Japanese Patent Application Publication Number Hei 9 (1997)-6771 A of Canon, Inc., partial translation provided by

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applicant in the Information Disclosure Statement filed November 13, 2002 (hereinafter “Canon”) and U.S. Patent Number 5,829,023 to Bishop, issued October 27, 1998, filed April 24, 1996.

Yang et al. does not teach storing a last-access date of an affirmed character string when storing the string. However, Canon teaches reading “the date and time of registration” of a string in a dictionary (Canon Abstract, CONSTITUTION, line 6), which inherently required that the date and time be stored when the string was stored. Moreover, Canon teaches the benefit of enabling automatic removal items from a dictionary. Therefore, it would have been obvious to one of ordinary skill in the art to have stored a last-access date of an affirmed character string when storing the string.

Further, Yang et al. do not teach changing the last-access date of an already-stored string when it is accessed. However, Bishop teaches maintaining “a file attribute containing information concerning the date and frequency of use of a particular file.” (Bishop, col. 4, lines 19-21.) Moreover, one of ordinary skill in the art would have been motivated to implement such a step because one of ordinary skill would have recognized that users would be most likely to want to access files (or strings) which they had most recently accessed. Therefore, it would have been obvious to one of ordinary skill in the art to have changed the last-access date of an already-stored string when it is accessed.

Further, Yang et al. do not teach using the last-access date when generating the output candidate character string. However, Canon teaches determining whether information in a dictionary has been accessed recently enough to be valid for use. (Canon translation of page 3, lines 22-26.) Moreover, one of ordinary skill would have recognized that the most recently-

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entered strings would be most likely to be relevant to users. Therefore, it would have been obvious to one of ordinary skill in the art to have used the last-access date when generating the output candidate character string.

7. **Claim 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al. in view of Matsushita, Miller et al., Bishop, Japanese Patent Application Publication Number Sho 61-32186, published February 14, 1986, partial translation provided in applicants' Information Disclosure Statement filed February 28, 2000 (hereinafter "Hitachi"), and Japanese Patent Application Publication Number Hei 9-179859, published December 12, 1995, partial translation provided in applicants' Information Disclosure Statement filed February 28, 2000 (hereinafter "Just Syst").

Regarding **dependent claim 7**, Yang et al. do not teach associating character strings that are used in a pre-existing electronic text with information relating to a user creating the electronic text, its time of creation, and the apparatus by which the text was created. However, one of ordinary skill in the art would have recognized the desirability of generating situation-optimized dictionaries from pre-existing electronic texts as well as affirmed character strings because one of ordinary skill would have known that pre-existing electronic texts would have provided a large body of relevant strings for the dictionary. Moreover, Hitachi suggests associating character strings with the user creating the electronic text inasmuch as Hitachi teaches storing different content for different user so as to increase processing efficiency. (Hitachi, translation of page 4, lines 1-9.) Bishop teaches maintaining "a file attribute containing information concerning the date and frequency of use of a particular file" (Bishop, col. 4, lines 19-21), and one of ordinary skill in the art would have recognized that more recently-created

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filed would have been more likely to have relevant entries. Just Syst teaches processing a character string according to the device into which it has been inputted (Just Syst, translation of page 2, lines 8-10), and one of ordinary skill in the art would have recognized that different devices would have had different requirements for entering strings. Therefore, it would have been obvious to one of ordinary skill in the art to have associated character strings that are used in a pre-existing electronic text with information relating to a user creating the electronic text, its time of creation, and the apparatus by which the text was created.

Response to Arguments

8. Applicant's arguments with respect to claims 1, 8, and 9 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

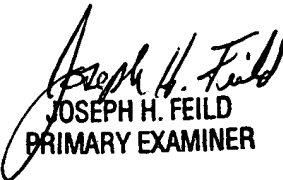
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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles A. Bieneman whose telephone number is 703-305-8045. The examiner can normally be reached on Monday - Thursday, 7:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 703-308-5186. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

CAB
June 11, 2003


JOSEPH H. FEILD
PRIMARY EXAMINER